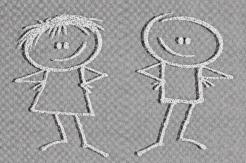


## Mathematics 4

# Module 4 Addition and Subtraction



Assignment Booklet 4A





#### FOR TEACHER'S USE ONLY

#### **Summary**

	Total Possible Marks	Your Mark	
Day 1	19		
Day 2	24		
Day 3	28		
Day 4	36		
Day 5	36		
Day 6	36		
	(1) 9		
Day 7	(2) 10		
	(3) 29		
	227		

#### **Teacher's Comments**

This document is intended	ed for
Students	1
Teachers	1
Administrators	
Home Instructors	1
General Public	
Other	

Mathematics 4 Module 4: Addition and Subtraction Assignment Booklet 4A Learning Technologies Branch ISBN 0-7741-1658-7

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# ASSIGNMENT BOOKLET 4A MATHEMATICS 4 – MODULE 4: ADDITION AND SUBTRACTION

#### Notes to the Home Instructor

#### **Learning Tasks**

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#### Assessment and Evaluation

A broad range of assessment tools will be used to gather information for the purpose of evaluating the student's knowledge and understanding of curriculum skills and concepts. It is important that the teacher learns how the student thinks about mathematics as well as what concepts and skills the student has mastered. Assignment Booklet questions, journal entries, performance assessments, observations by the home instructor, and student self-evaluation pages may all be used. As well, the teacher may also use a final test.

In order to give the student and home instructor feedback on the student's current level of achievement throughout the school year, the student's teacher will provide written comments and assign a grade at the end of each module. The mark for each module will be determined primarily by how well the student completes the assignments in the Assignment Booklets. However, other broad-based assessment techniques (journal entries, performance assessments, and so on) may also be used.

-		_	\
	1	Q	1
1		7	1
1	_	_	

## Day 1: Making Sense of Operations

_
(2)

1.	List	the	four	basic	math	operations.
						op or or or or or



2. Turn to pages 80 and 81 in your textbook. Use the picture shown on those pages to write **four** problems, one for each operation. Decide on the type of operation needed to solve the problem and write it in the box.

	150 (10)		

3



## Day 2: Addition and Subtraction Number **Facts**

-	_
1	0
ı	J
1	

1.	Use the order property for addition to explain how three numbers can	an be
	added together in three different ways.	



2. Write the four related facts for each of the following number facts.



**a.** 
$$9+8=$$







**b.** 
$$15 - = 8$$





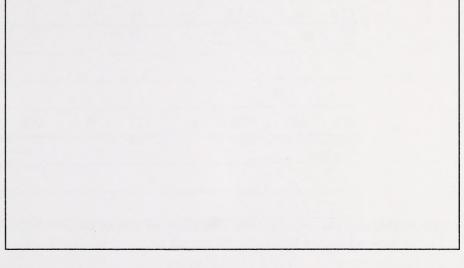
c. 
$$-9 = 5$$



4	-	
/	_	1
ı	:	- }

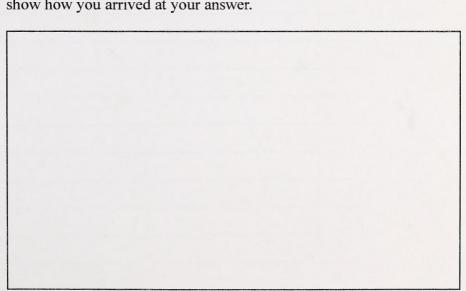
3. a. In the space below, create a word problem that uses the addition number fact 9+9= . Then solve the problem. Use drawings to show how you arrived at your answer.

5



(5)

**b.** In the space below, create a word problem that uses the subtraction number fact 14-5= Then solve the problem. Use drawings to show how you arrived at your answer.





4.

## **Journal Entry**

Tell what you know about related facts. Explain why knowing one number fact really helps you to know four facts.				
moet fact really help	is you to kii	low four fa	Cis.	
			Proposition (Control	



## Day 3: Adding Whole Numbers



1. Find each of the following sums.

- **2.** Solve each of the following story problems. Show your calculation and give a word answer (e.g., 54 blocks, 27 cars, and so on) for each.
- 2
- **a.** Joyce and Rita collect stamps. Joyce has 683 stamps. Rita has 681 stamps. Altogether, how many stamps do they have?

(2

**b.** Stuart's family travelled by car for three days.

Day 1: 263 km Day 2: 198 km Day 3: 87 km

What was the total distance travelled?

2

**c.** A video rental store rented 564 movies on Friday and 637 movies on Saturday. How many movies were rented over the two days?



**3.** Turn to page 85 in your textbook. Do questions 1 to 5 in Practise Your Skills.

Practise Your Skills, Questions 1 to 5

(5)

1. 2.

3.

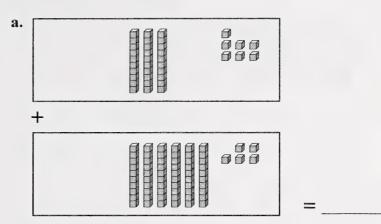
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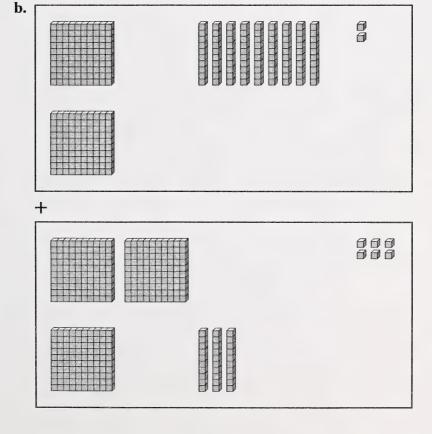
5.

4. Regroup the base ten blocks in the following addition problems in order to find each sum.

(3)



(3



(3)

=



## **Day 4: Addition Strategies**



1. Riddle Time

What is it that we have in December that we don't have in any other month?

To solve the riddle, find the sum for each of the following questions. Then write the letters of the questions that match the answers in the spaces provided.

611	856	1658	899	1658	611	611	1658	1370	1795



**2.** Turn to page 87 in your textbook. Answer questions 2, 3, and 4 in On Your Own.

On Your Own, Question 2



2	On Your Own, Question 3
5	On Your Own, Question 4
	Story Problem
	Explain how you would solve the problem.

- (5)
- 3. Estimate the sum for each problem by rounding to the nearest hundred. You do not need to find the exact answer. An example is done for you.

Example: 
$$126 \rightarrow 100 \\ + 287 \rightarrow + 300 \\ \hline 400$$

- **4.** Use rounding to estimate the answer to each story problem. Then find the exact answer. Be sure to include a word answer.
  - **a.** A hot dog stand sold 276 hot dogs on Friday, 385 hot dogs on Saturday, and 437 hot dogs on Sunday. How many hot dogs were sold in all?

Estimate

**Exact Answer** 

4

**b.** Tyler's father owns a sports equipment store. Last month he sold 356 baseballs, 293 soccer balls, and 232 footballs. How many balls were sold in all?

Estimate	Exact Answer

(4)

**c.** A baker baked 845 loaves of bread on Monday. On Tuesday he baked 1262 loaves. On Wednesday he baked 978 loaves. How many loaves did he bake altogether?

Estimate Exact Answer



### 5.

## Journal Entry

Make up an addition question using two-digit or three-digit numbers. Show more than one way to do the addition. Then discuss which method you prefer. Tell what makes one method easier for you than the other.			



## **Day 5: Subtracting Whole Numbers**



1. Find each of the following differences.

**2.** Solve each of the following story problems. Show your calculation and give a word answer (e.g., 54 blocks, 27 cars, and so on) for each.

2

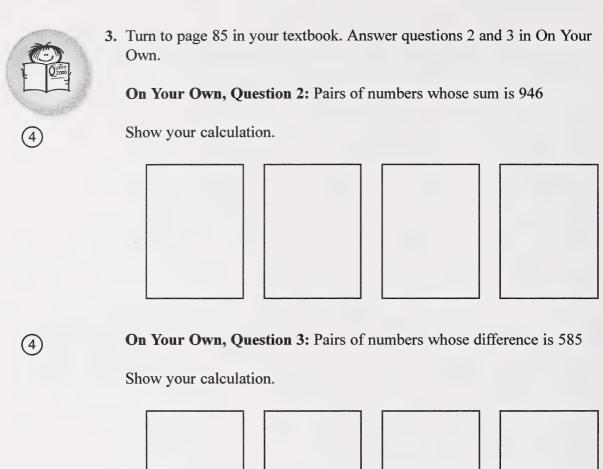
**a.** Kaitlyn and her family drove to Saskatoon, a distance of 746 km. They drove 463 km the first day. How many more kilometres did they have left to drive on the second day?

(2)

**b.** Jackie's Ski Shoppe has 368 pairs of skis for rent. Lucky's Ski Rentals has 425 pairs of skis for rent. How many more pairs of skis does Lucky's have for rent?

(2)

**c.** The bookmobile from the local library had 578 books for loan during the month of March. In April, the bookmobile had 722 books for loan. How many more books were on the bookmobile in April than in March?





**4.** Turn to page 85 in your textbook. Answer questions 6 to 10 in Practise Your Skills.

Practise Your Skills, Questions 6 to 10

 5
 6.
 7.
 8.
 9.
 10.

5. Solve each of the following subtraction problems by regrouping the base ten blocks.

3 a.		

Subtract 45.

=

3	<b>b.</b>	

Subtract 188.

= \_\_\_\_\_

(3)

c.

Subtract 256.

=



## **Day 6: Subtraction Strategies**



1. Riddle Time

Why did the cook put suntan oil on the turkey?



To solve the riddle, find the difference for each of the following questions. Then write the letters of the questions that match the answers in the spaces provided.

	22	25 8	7	119	<b>86</b> 1	135 82	7 87	377	
86	25	25	377	86	256	227	19	87 86	827
A	143 - 57	<b>D</b>		E _		<b>G</b> 1	01 <b>H</b>	651 - 426	
K	406 - 179	L =	41	M _	27	N 1		490 - 234	



2. Turn to page 88 in your textbook. Answer questions 6, 7, and 8 in On Your Own.

0,200	On Your Own, Question 6
2	
2	On Your Own, Question 7

On Your Own, Question 8
Story Problem
Explain how you would solve the problem.

(5)

3. Estimate these differences by rounding to the nearest hundred. You do not need to find the exact answer. An example is done for you.

**Example:** 
$$162 \rightarrow 200$$
  
 $-68 \rightarrow -100$   
 $100$ 



**4.** Turn to page 89 in your textbook. Answer questions 10 and 11 in On Your Own.

On Your Own, Question 10

2

A STATE OF THE STA	

2

On Your Own, Question 11

- (6)
- **5.** Find each answer and then use the reverse operation to check your answer.

Check

Check

Check

## Day 7: Assessing What You Know (I)



#### Home Instructor's Assessment Page for Day 7

#### **Directions for the Home Instructor**

Remove this sheet from the Assignment Booklet. Use the Checklist and Comments sections to help evaluate the student's work. When the Day 7 activities have been completed, firmly attach this sheet to Assignment Booklet 4A.

Student's Name	
Home Instructor	Date

Indicate in the Checklist and Comments sections what you observe and hear as the student works through the assessment task. Encourage the student to "think out loud" as he or she works. As you observe, you may wish to use questions or prompts like the following to help in determining the student's level of understanding:

- What do you do first when you are trying to solve a problem like this?
- How did you decide which operation to use?
- Why did you decide to do your calculation that way?
- Is there another way you could have done the calculation?
- How do you know if your answer is correct?

Checklist	
A. The student uses an organized method or procedure to solve the problem.	Yes Not yet
B. The student can name the operation being used to calculate the answer, and can clearly explain why that operation is being used. (e.g., If subtraction is being used, the student can explain why subtraction rather than addition has been chosen.)	Yes Not yet
C. The student uses estimation or the reverse operation (addition) to check that his/her answer is reasonable or correct.	Yes Not yet
D. The student can perform adding and /or subtracting tasks with ease (i.e., has memorized the adding and subtracting number facts and understands regrouping).	Yes Not yet
Comments	-
Add any comments you have regarding the student assessment task or any other information about the experiences in this module that you would like to	ne student's learning



## Day 7: Assessing What You Know (I)

**Student's Assessment Page for Day 7** 



Student's Name

## Part 1: Showing What You Can Do



**Note:** You may use any manipulatives or cut-out learning aids available to help solve the following problems.

4

1. Solve the following problem. Show all your work.

Kato and Tanya had 700 flyers to deliver to homes in their neighbourhood. By noon, Kato had delivered 318 flyers and Tanya had delivered 286 flyers. How many more flyers did they still have left to deliver?

- 2. Tell which operation or operations you used to solve this problem. Tell why you chose the operations you did.
- 3. Show how you check to show that your answer to the problem is correct (without using a calculator)?

## Part 2: Basic Number Facts



This section is made up of two timed tests. Ask your home instructor to time you as you do each test. Wait for your home instructor to tell you when to begin. Do not mark these tests. They will be marked by your teacher.

1. Addition Number Facts **Timed Test: 2 minutes** 

$$8 + 4 =$$

$$9 + 9 =$$

$$9+7=4+9=$$

$$4 + 9 =$$

$$8 + 6 =$$

$$8 + 5 =$$

$$6+9=$$

$$9 + 5 =$$

$$5+7=$$

$$6 + 8 =$$



If you finish before the two minutes are up, check your answers. Wait for your home instructor to tell you when to begin the next test.

5 2. Subtraction Number Facts
Timed Test: 2 minutes

$$12-9=$$
  $15-6=$   $18-9=$   $14-8=$   $17-8=$ 

$$14-9=$$
  $13-7=$   $15-9=$   $13-8=$   $17-9=$ 

## Part 3: Adding and Subtracting Test



Complete this test without help from your home instructor. Do not use a calculator. Show all your calculations on this page.

#### Add

#### Subtract

Find the answer for each of the following questions. Then use the reverse operation to check that your answer is correct.

8 Estimate first and then find the exact answer.

**14.** 723 + 297

**15.** 894 – 315

Estimate	Estimate	Estimate	Estimate



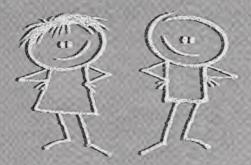
### 16.

## Journal Entry

Make up a subtraction question using two-digit or three-digit numbers. Show more than one way to do the addition. Then discuss which method you prefer. Tell what makes one method better than the other.			

## Mathematics 4

Module 4
Addition and
Subtraction



Assignment Booklet 4B





### FOR TEACHER'S USE ONLY

### **Summary**

	Total Possible Marks	Your Mark
Day 8	51	
Day 9	25	
Day 10	24	
Day 11	26	
Day 12	43	
Day 13	35	
Day 14	(1) 94	
	(2) 21	
Day 15	(1) 10	
Day 15	(2) 10	
	339	

#### **Teacher's Comments**

This document is intended for		
Students	1	
Teachers	1	
Administrators		
Home Instructors	1	
General Public		
Other		

Mathematics 4 Module 4: Addition and Subtraction Assignment Booklet 4B Learning Technologies Branch ISBN 0-7741-1659-5

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# ASSIGNMENT BOOKLET 4B MATHEMATICS 4 – MODULE 4: ADDITION AND SUBTRACTION

#### Notes to the Home Instructor

### **Learning Tasks**

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## Day 8: Adding and Subtracting Large Numbers



1. For each problem, estimate by rounding to the nearest thousand. You do not need to find the exact answer.

a. 
$$6328 \rightarrow$$
 $+ 2867 \rightarrow$   $+$ 

$$\begin{array}{cccc} \mathbf{b.} & 9428 \rightarrow \\ & -5925 \rightarrow \end{array}$$

c. 
$$3434 \rightarrow$$
 $+ 1767 \rightarrow$   $+$ 

$$\begin{array}{ccc}
\mathbf{d.} & 5311 \rightarrow \\
& -962 \rightarrow & -
\end{array}$$

**2.** Find the sum or difference for each problem. Use the reverse operation to check your answers. Be sure to include a word answer.

(5)

**a.** A park warden records the number of vehicles entering and leaving the park each day. How many vehicles were still in the park at the end of the day on Friday, July 10?

Friday, July 10	
Vehicles Entering	2706
Vehicles Leaving	1859
Vehicles Still in Park	?

Solution

Check

5	"Alien Attack." His total score	<b>b.</b> Brad spent one rainy afternoon playing a computer game called "Alien Attack." His total score was 7264. If he scored 2685 points on his first game, how many points did he score on his second game?			
	Solution	Check			
(5)	c. The hospital parking lot holds 2 already parked, how many more				
	Solution	Check			
(5)	balloons, 300 were red, 250 we	arge of releasing 2000 helium w Year's Eve celebrations. Of these re yellow, 325 were blue, 250 were e rest were white. How many of the			
	Solution	Check			

287 + 134 + 82

3. Use estimation to decide which numbers from the box make each sum or difference in the questions below. You may use more than two numbers to make a sum. Many answers are possible for some questions. Try to find **two** possible answers for each question.

82	134	287	398	472
578	622	791	884	902

82 + 398

	<b>Example:</b> a sum of about 500	02   0>0	
2	a. a sum of about 900		
2	<b>b.</b> a sum of about 1000		
2	c. a sum of about 1200		
2	<b>d.</b> a difference of about 600		
2	e. a difference of about 400		
2	<b>f.</b> a difference of about 100		

- (10)
- 4. Use mental math to find the answer to each of the following questions.



3.

## **Journal Entry**

Describe a mental math strategy you could use to add or subtract large numbers. Explain how you would use it and give several examples to show how the strategy could help you do calculations.			

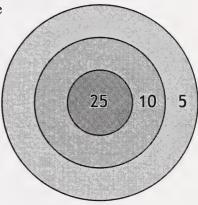


### Day 9: Problem Solving

Use the four-step problem solving process to solve the following problems. Some of the problems use the Making a List strategy. You may use this or any other strategy that you think will help you solve each of the problems.

(5)

1. Maryanne threw 3 darts at a dart board like the one shown. Each dart landed on the board. List all the point totals that Maryanne could have made by throwing her 3 darts.



(5)

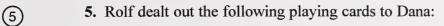
2. Every weekend Rachel likes to visit Dairy World to buy an ice-cream sundae. She tries to have a different sundae each time she goes by choosing one kind of ice cream, one kind of sauce, and one kind of sprinkle to go on top. She chooses between orange, vanilla, or strawberry ice cream. For sauces, she likes chocolate or butterscotch. For sprinkles, she chooses peanuts, walnuts, or coconut. How many different sundaes could Rachel order?



**3.** Lydie is saving nickels and pennies. She has a total of 75 coins worth \$2.55. How many nickels and how many pennies does she have?

(5)

4. Melody purchased some candy. The GST on her purchase came to  $27\phi$ . She looked in her change purse to find the extra  $27\phi$ . What are all the different combinations of coins that Melody could have used to make up the  $27\phi$ ?





These four cards can be used to make many four-digit numbers.

Example: 2589

How many different ways can the cards be arranged so that a new number is formed each time?



## Day 10: Adding and Subtracting Decimals (Tenths)



1. Write a decimal number to describe the shaded part in each question.

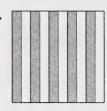
a.



b.



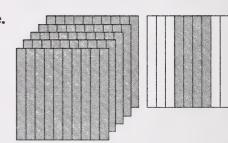
•



d.



e.

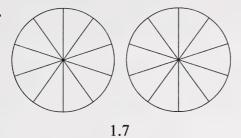


- (3)
- 2. Write each of the following as decimal numbers.
  - a. three and seventh tenths \_\_\_\_\_
  - **b.** twenty-four and three tenths \_\_\_\_\_
  - c. six tenths

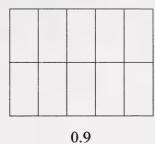


3. Use a coloured crayon or a felt to shade in the correct amount.

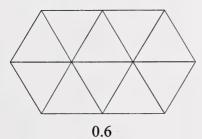
a.

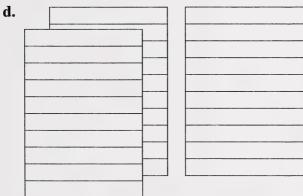


b.



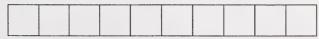
c.





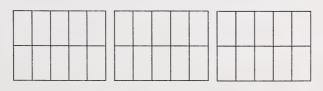
2.3





1.0







(5)

Solve problems 4 and 5 using base ten drawings or cutouts. If you use cutouts, you will have to glue them in place. Be sure to include a word answer.

**4.** Frank's father needs to replace the cord on an old lamp. He has a roll of cord that is 6.2 m long. He decides to cut a new piece of cord that is 3.9 m long. How much cord will be left on the roll?



5. One of Katie's duties at the restaurant is to cut potatoes into French fries. For her first batch of French fries, she used 6.5 kg of potatoes. For her second batch, she used 5.7 kg of potatoes. How many kilograms of potatoes did she use in all?



## Day 11: Adding and Subtracting Decimals (Hundredths)



1. For each of the following questions, write the decimal number that describes the shaded part. Then write each decimal number in words.

a. b. c. d. (4)

2. Write each of the following as a decimal number.

a. nine hundredths

**b.** seventeen hundredths

.....

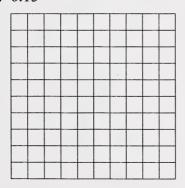
**c.** thirty-eight hundredths

**d.** six and sixty-one hundredths

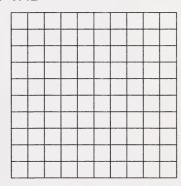
4

3. Use a felt marker or coloured crayon to shade in the correct amount.

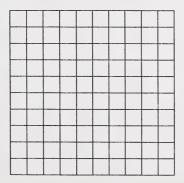
**a.** 0.13



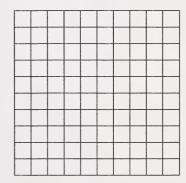
**b.** 0.42



**c.** 0.08



**d.** 0.80





(5)

**4.** Use base ten drawings or cutouts to show your understanding of adding decimal numbers when regrouping is involved. If you use cutouts, you will have to glue them in place.

Craig's car is 2.59 m long. Sometimes he hauls a trailer that is 1.64 m long. What is the total length of the car and trailer?

$$2.59 + 1.64 =$$

Word answer:			





(5)

5. Use base ten drawings or cutouts to show how you would do the subtraction and regrouping to find the difference in the following problem. If you use cutouts, you will have to glue them in place.

Bev used some metallic red ribbon to wrap a present for her grandmother. There was 1.03 m of ribbon on the roll before she began. She used 0.57 m of ribbon. How much ribbon was left on the roll when she was finished?

$$1.03 - 0.57 =$$

Ones	Tenths	Hundredths -

Word answer:		
***************************************	 	

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### Day 12: Working with Money Amounts

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	<u>ئ</u>	

- 1. Write these money amounts in two ways (with a cent sign and then with a dollar sign).
  - a. ninety-nine cents
  - **b.** eight cents \_\_\_\_\_
  - c. thirteen cents
- (3)
- 2. Write these money amounts using a dollar sign and a decimal.
  - a. fifty-one dollars and eighty-four cents \_\_\_\_\_
  - **b.** two dollars and one cent \_\_\_\_\_
  - c. seventy-six cents

- (3)
- **3.** Use words to write each of these amounts.
  - **a.** \$0.49 \_\_\_\_\_
  - **b.** \$15.08
  - **c.** \$100.53 \_\_\_\_\_



**4.** Turn to page 85 in the textbook. Do questions 1.a. to 1.f. in On Your Own.

### On Your Own, Question 1

(12)

Estimate and then add or subtract to find the exact answer.

a. Estimate:	<b>b.</b> Estimate:
c. Estimate:	<b>d.</b> Estimate:
e. Estimate:	<b>f.</b> Estimate:

- 4
- 5. Mark bought a flashlight and two batteries at a hardware store. He paid \$7.98 for the flashlight, and \$3.94 for two batteries. If he paid with a 20-dollar bill, how much change would he get back?
  - Show how you would solve this problem.
  - Draw the change Mark received.



6. Mr. and Mrs. Vernon and their two children took the ferry from Vancouver to Victoria.

Vancouver to Victoria Ferry (One-way Fares)				
Adult	•			
Child	\$4.75			
Car	\$29.00			

**Estimate** the cost of the ferry ride if they took their car. Show how you arrived at your answer. (**Hint:** How many adults are there? How many children are there?)



- (3)
- 7. Solve each of the following problems. Show your method of calculation. You may use base ten drawings or cut-out manipulatives or find the answer in some other way. Be sure to include a word answer.
  - **a.** Sylvia emptied the coins out of her change purse. She had 5 loonies, 6 quarters, 4 dimes, 7 nickels, and 19 pennies. How much money does she have?

- 3
- **b.** Calvin used a two-dollar coin to pay for a chocolate bar. He got \$1.09 back in change. How much did the chocolate bar cost?



c. Bobbie and Brennan are brothers. They decided to combine their money to buy a bicycle. Together they had a total of \$78. Bobbie put in \$16 more than Brennan. How much money did they each contribute? (What problem solving strategy have you already learned that will help you solve this problem?)



### 8.

### **Journal Entry**

How does estimating help when you are solving adding and subtracting problems in daily life? Tell about times when you have used estimating to solve an adding or subtracting problem in real life.		
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### Day 13: Choosing a Calculation Method

1. Look at each of the following problem situations. Tell what method of calculation you would use in order to find the answer to the question. Then explain why you think this method is the best one to use. It is not necessary to find the answer to each problem.

Choose from these methods:

- manipulatives
- pencil and paper
- calculator
- · mental math
- estimation

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**a.** Twin calves were born on Erica's farm last spring. One calf weighed 23.85 kg. The other calf weighed 19.70 kg. About how much heavier was the bigger calf?

What method of calculation would you use to solve this problem?

Explain why you chose this method.

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**b.** Patrick set up a home weather station to record weather changes during the month of May. The rain gauge measured the amount of rainfall. He recorded this information on a chart like the one below. How much rain fell in April?

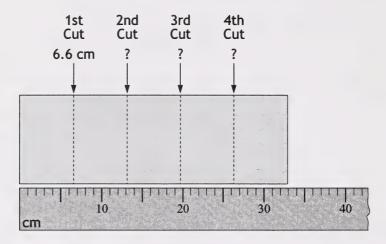
Day	Rainfall	Day	Rainfall
April 5	5 mm	April 18	14 mm
April 6	26 mm	April 19	12 mm
April 10	6 mm	April 22	2 mm
April 13	3 mm	April 23	20 mm
April 15	22 mm	April 24	13 mm
April 17	10 mm		

1 ' 1				
plain why yo	ou chose tr	ns method.	 	

What method of calculation would you use to solve this problem?

(3)

c. Dirk is making math flash cards from strips of posterboard. He can get five flash cards from each 33 cm long strip. He used a ruler to mark the first cut at 6.6 cm. Calculate where he must make the second, third, and fourth cuts.



What method of calculation would you use to solve this problem?

Explain why you chose this method.



**2.** Turn to page 101 in your textbook. Do questions 3 and 4 in On Your Own.

On Your Own, Question 3

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a.	
b.	
c.	
d.	

3	On Your Own, Question	on 4	
	a.		
	b.		
	c.		
	d.		



		ion 9		
Show yo	ur calculation	n for questi	on 9.	
*				



#### 4.

# **Journal Entry**

Some people say they don't need to know how to add, subtract, multiply, or divide because they always use a calculator to find the answer. Explain why it is important to know how to do calculations in a variety of ways.					

## Day 14: Putting It All Together

Use what you know about adding and subtracting to complete the following exercises. Look back in the Student Module Booklet if you need to review any of the concepts you have studied. You are to complete all the Review Activities.

(94)	١
(77)	•

## Part 1: Reviewing the Concepts

(2)	
$\sim$	

1. List the four basic math operations.

•	

**2.** Create a story problem for each of the following number facts. Then solve the problem. Use drawings to show how you arrived at your answer.



9+8=

b. 16 0-

16-9=

(10)

**3.** Round to the nearest hundred to estimate the sum for each of the following questions. Then find the exact answer.

Estimate
Esumate

Estimate

Estimate

**Estimate** 

**Estimate** 

**(6)** 

**4.** For each of the following questions, find the difference. Then check your answers by using the reverse operation.

Check

Check

Check

**(6)** 

**5.** Round to the nearest hundred to estimate the difference for each of the following. Then find the exact answer.

**Estimate** 

**Estimate** 

**Estimate** 

	_	
1		1
1	2	
۸.	• •	

6. Explain how you would use mental math to find the following sum.

$$6003 - 1999 =$$

	_	
		1
1	- 1	- 1

7. Use estimation to find two or more numbers from the box that make each sum or difference in the questions below.

393	792	668	284	165	
473	608	987	131	881	

- **a.** a sum of about 1000 \_\_\_\_\_
- **b.** a sum of about 300 \_\_\_\_\_
- c. a difference of about 100 \_\_\_\_\_
- d. a difference of about 500

6

**8.** Estimate the following money amounts. Round to the nearest dollar. Write your estimate on the line.







**9.** Turn to pages 82 and 83 in your textbook. Do the following parts of question 2 of Starting Out.

#### **Starting Out, Question 2**

(2)

**a.** Estimate the total cost of the groceries. Show how you arrived at your estimated answer.

(2)

**b.** Estimate how much change there would be from \$20.

2

**c.** Estimate the cost of one grapefruit.

(2)

d. Estimate the cost of one dozen oranges.

8	e.	Write four story problems using information from the flyer. Be sure to have one problem for each of the four operations.
		Story Problem 1:
		Story Problem 2:
		Story Problem 3:
		Story Problem 4:



For questions 10 and 11 use base ten drawings or cutouts to show your solution. Be sure to give a word answer.

**10.** Greg and Simon each painted a mural for a display in the school gym. Greg's mural was 3.8 m long. Simon's mural was 4.6 m long. When placed side-by-side, how much space did the two murals take up?





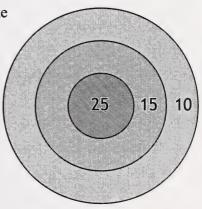
Greg's mural

Simon's mural

11. Donna had 6.35 m of ribbon for her craft project at school. She measured out and cut off 2.78 m of ribbon. How much ribbon was left?

**12.** Use the four-step problem solving process to solve each of the following problems.

a. Phillip threw 3 darts at a dart board like the one shown. All the darts landed on the board. List all the point totals that Phillip could have maded by throwing his 3 darts.



**b.** Fiona tossed 3 pennies in the air so that they all landed on a table with either their heads or tails face-up. How many different combinations of heads and tails are there for 3 coins?

**(5)** 

**c.** Randy put a one-dollar coin (loonie) into a pop machine. Pop costs 55¢. If the machine takes nickles, dimes, quarters, and loonies, how many different ways could the machine give out his change?

13.	For each	of the	followin	g situa	ations,	tell w	hich	of the	calcula	tion
	methods	you w	ould use.	Then	give a	reaso	n for	your	choice.	

- calculator
- manipulatives
- estimation
- mental math
- pencil and paper

2	a. You are in a hardware store. You have 7 different items in your basket that you plan to buy. You want to know before you get in line to pay if the total will be more than \$20.
2	b. You are in food store waiting for the sales clerk to ring up your purchase. You are buying 3 bags of flour for \$5.99 each. You give the clerk a \$20. You calculate how much change you should get back.

1 jacket\$42.95
2 pairs of jeans\$22.79
1 pair of shorts \$8.89
3 t-shirts\$11.99
1 pair of sneakers \$35.99
How would you calculate the total cost of all 8 items?



## Part 2: Challenge Activities



Choose and complete either Activity A or Activity B. (You may do both if you wish.)

#### Activity A: How Many Days Old Are You?

Everyone knows their age in years. For this activity, you will calculate your age in days using more than one method of calculation.

- 1
- (2)
- 2. Show how you would estimate how many days old you are.

- (3)
- **3.** Use **paper and pencil** to calculate your exact age in days. (**Hint:** You may find it helpful to use a calculator.)

5	4.	Use a <b>calculator</b> to find your exact age in days. Write down the steps you followed. Tell what buttons you pushed on the calculator to arrive at your answer.

#### Activity B: The Amazing 10-dollar Bill



5. Questioning Quigley discovered something interesting while shopping in a store. He spent \$1.85, paid with a 10-dollar bill, and got back \$8.15. While counting his change, he realized that both the amount he paid and the change have the same three digits in them. When he investigated, he found there were four other amounts that could be paid for with a 10-dollar bill that had the same digits for both the change and the amount paid. What are they? (Hint: At least one of the digits will be 5 in each number.)

## Day 15: Assessing What You Know (II)



#### Home Instructor's Assessment Page for Day 15

#### **Directions for the Home Instructor**

Remove this sheet from the Assignment Booklet. Use the Checklist and Comments sections to help evaluate the student's work. When the Day 15 activities have been completed, firmly attach this sheet to Assignment Booklet 4B.

Student's Name	
III a a a a I a atau a atau	Data

Indicate in the Checklist and Comments section what you observe and hear as the student works through the assessment task. Encourage the student to "think out loud" as he or she works. As you observe, you may wish to use questions or prompts like the following to help in determining the student's level of understanding:

- What do you have to do first?
- Which cutouts represent ones? Tenths?
- Which operation did you use first? Second?
- Explain what happened when you added those two numbers together.
- Explain what happened when you subtracted those two numbers.
- How do you know if your answer is correct?



**Note:** If the student wishes, he or she may use any manipulatives or cutouts available to help solve the problem.

Checklist	
<b>A.</b> The student uses an organized method or procedure to solve the problem.	Yes Not yet
B. The student can name the operation being used and can explain why it is being used.	Yes Not yet
C. The student uses estimation or the reverse operation (addition or subtraction) to check that the answer is reasonable or correct.	Yes Not yet
D. The student can perform adding/ subtracting tasks involving regrouping with ease (can show regrouping from tenths to ones and ones to tenths).	Yes Not yet
Comments	
Add any comments you have regarding the stu assessment task or any other information about experiences in this module that you would like	t the student's learning

## Day 15: Assessing What You Know (II)

Student's Assessment Page for Day 7

Student's Name



## Part 1: Showing What You Can Do

#### **Working with Tenths**



**Note:** You may use any manipulatives or cut-out learning aids available to help solve the following problems.

Show how you would solve the following problem. Use base ten drawings or cutouts to help explain your solution. If you use cutouts, you will have to glue them in place once you have completed the problem. Cutouts can be found in Day 15 of the Cut-Out Learning Aids section in the Appendix.

Melissa needs 3.4 m of fabric to make her costume for the school play. She has 1.5 m. Her sister gave her 2.7 m. How much fabric will she have left over once her costume is made?

(5)

1. Show your solution to the problem. Use the space on the next page. Be sure to show all of your work.

2. Write a word sentence for your answer to the problem.

2. What could you do to check that your answer to the problem is correct (without using a calculator)?

4. Explain which operations you used and how you used them to solve this problem.



#### Part 2: Basic Number Facts



This section is made up of two timed tests. Ask your home instructor to time you as you do each test. Wait for your home instructor to tell you when to begin. Do not mark these tests. They will be marked by your teacher.

1. Addition Number Facts **Timed Test: 2 minutes** 

$$8 + 8 =$$

$$7 + 6 =$$

$$8+8=$$
  $7+6=$   $8+7=$   $6+9=$ 

$$6 + 9 =$$

$$7 + 7 =$$

$$9 + 7 =$$

$$7+8=9+6=6+8=$$

$$4+9=$$



If you finish before the two minutes are up, check your answers. Wait for your home instructor to tell you when to begin the next test.

2. Subtraction Number Facts
Timed Test: 2 minutes

$$14-5=$$
  $12-9=$   $16-8=$   $14-7=$   $11-6=$ 

$$16-7=$$
  $15-8=$   $14-7=$   $12-5=$   $14-6=$ 

### Part 3: Thinking About What You Know

This is a chance for you to assess your own knowledge and abilities in mathematics. Take a few minutes before you begin writing to look back through Days 1 to 14 in your Student Module Booklet. On what days did you learn new things? Was there anything you found difficult or hard to understand? What things did you enjoy? What things would you like to know more about?

Now, using complete sentences, finish the following paragraph starters. You may wish to talk over your ideas with your home instructor before you begin writing.

I think	k this mod	ule is ma	ainly abo	ut		
-						
Some	things I le	earned in	this mod	dule are _		
-						
-						
	7 01 01			All the state of t		

3.	One thing I liked about this module is
4.	Something I don't really understand is
5.	Something I would like to learn more about is
6.	Something else I'd like to say is

